
Safety Assessment Surveys

Robert C. Figlock, Ph.D.

Advanced Survey Design

Overview

- **Intro - Command Safety Climate Assessment Survey**
- **Background - High Reliability Organizations**
- **Current Surveys/Additional Surveys**

- **Example - Safety Climate Assessment Survey**
- **Commander Tools for Assessment**

Command Safety Assessment Survey

- **Command Safety Climate Assessment Survey**
 - **Focus: Squadron-level organizational dynamics as they relate to safety**
 - Perceptions and attitudes underlie human factors, affect safety
 - Looking for institutional vulnerabilities, not individual failings
 - **Survey items - Based on High Reliability Organization (HRO) concepts**

High Reliability Organizations (HRO)

- **HRO's - Organizations that have less than their "fair share" of failures despite:**
 - **Managing Complex/demanding technologies**
 - **Meeting peak performance requirements/time pressures**
 - **Routinely handling significant risk/hazards**
 - **Executing dynamic/intensely interactive tasks**
- **Examples**
 - **Nuclear power plants**
 - **Chemical processing plants**
 - **Navy aircraft carriers**
 - **Naval Aviation squadrons**
 - **Naval organizations**
 - **DoD organizations**

High Reliability Organizations (HRO)

- **Characteristics of HROs**
 - **Risk decisions made by most qualified**
 - **Use of redundancy and back up systems**
 - **Standardized procedures and best practices**
 - **Appropriate rewards and disciplinary action**
 - **Accurate management vision/risk analysis**

High Reliability Organizations (HRO)

- **Ways HROs mitigate risk**
 - Risk decisions made by most qualified
 - Use of redundancy, back up systems
 - Standardized procedures, best practices
 - Appropriate rewards, disciplinary action
 - Accurate management vision/risk analysis

High Reliability Organizations (HRO)

■ Model Components

- Process Auditing -- a system of on-going checks to monitor hazardous conditions
- Reward System -- expected social compensation or disciplinary action to reinforce/correct behavior
- Quality -- policies and procedures for promoting high-quality performance
- Risk Management -- how the organization perceives risks and takes corrective actions
- Command & Control -- policies and procedures used to mitigate risks
- Communication & Functional Relationships - effectiveness of information transfer and quality of relationships with surrounding organizations

Current Surveys

- **Current Surveys**
 - **CSA (aircrew)**
 - **MCAS (maintainer)**
 - **NADEP MCAS**
 - **Afloat Navy (NSC)**
 - **Army Risk Assessment Program (ARAP)**
 - **USAF - Safety Assessment Survey (SAS)**
-

Additional Surveys

- **Coming Soon!**
 - **Contractor maintenance**
 - **Higher headquarters staff**
 - **PMV**
 - **Drinking & Driving**
 - **Off Duty & Recreational activity**
- **DoD assessment surveys**

Safety Climate Assessment Survey

■ Definition

- Measurement of an organization's ability to safely conduct **maintenance** and **flight operations** in terms of leadership, culture, policies, standards, procedures, and practices.

■ Survey Policies

- Individual survey respondent **anonymity**
- Organizational **confidentiality**
- **Restricted access** codes provided to the unit CO
- HHQ ability to access aggregate data
- Ability to conduct unfettered research/data analysis

Safety Climate Assessment Survey

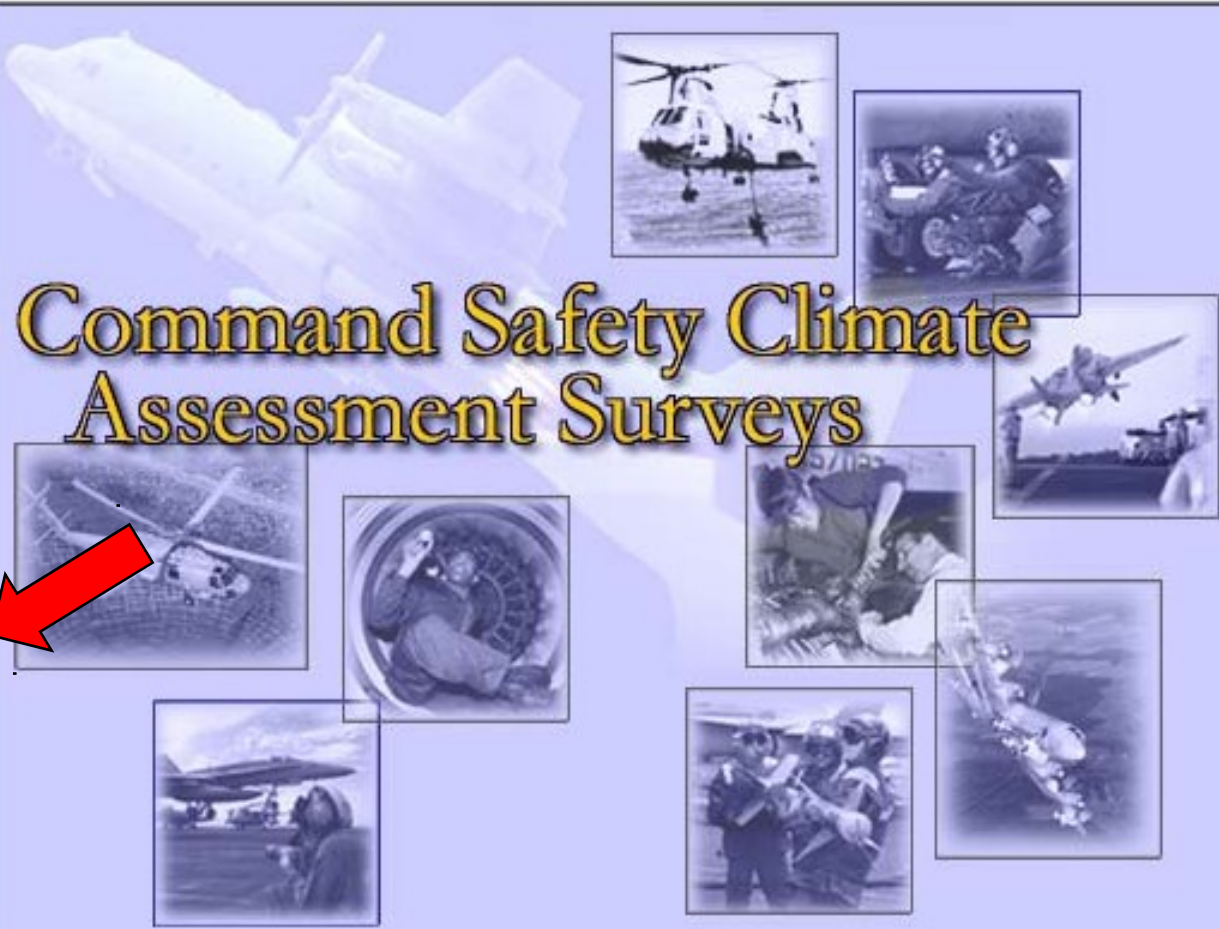
- **Aggregate survey items graph**
- **Individual survey item graphs**
- **Open-ended responses**
- **Printable data summary**
- **Debriefing support**
- **Intervention module**



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- C.S.C.A.S. POLICY
- SURVEY INSTRUCTIONS
- SURVEY OVERVIEW
- SAMPLE SURVEY
- TAKE A SURVEY
- SURVEY ADMIN
- CO ACCESS
- SAMPLE CO ACCESS
- ISSUE PAPERS
- SITE MAP
- HELP/FAQ
- CONTACT US
- SUGGESTIONS

Command Safety Climate Assessment Surveys



SAMPLE SURVEY (MCAS/NADEP)

PART I. DEMOGRAPHIC INFORMATION

The following survey is a **SAMPLE**. No actual responses will be recorded.
For the actual survey, no individual's demographic data will be made available to any CO.

Your Grade/Rank:

Total years aviation maintenance experience:

Total years Naval Aviation Depot experience:

Your current job/trade:

Total years in your current job/trade:

Your primary shift:

Your primary program:
(Select all that apply)

A-4
AH-1
AV-8
C-130

Your status:

Your Service:

Your parent command:

Your unit's location:

Closed-ended Items

44. The next quality defect will be caused by.... (200 words max.)

☐ No comment ☐ My response is:

45. The next quality defect can be prevented by (200 words max.)

☐ No comment ☐ My response is:

Demographic Data

The following survey is a **SAMPLE**. No actual responses will be recorded.

1. The NADEP adequately reviews and updates safety procedures.

☐ Strongly
Disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly
Agree

☐ N/A
☐ Don't
Know

2. The chain of command monitors artisan qualifications and has a program that targets training deficiencies.

☐ Strongly
Disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly
Agree

☐ N/A
☐ Don't
Know

3. Supervisors use safety and medical staff to identify/manage personnel at risk.

☐ Strongly
Disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly
Agree

☐ N/A
☐ Don't
Know

4. Quality Assurance routinely monitors rework/repair/maintenance tasks.

☐ Strongly
Disagree

☐ Disagree

☐ Neutral

☐ Agree

☐ Strongly
Agree

☐ N/A
☐ Don't
Know

5. Tool Control and support equipment licensing are closely monitored.

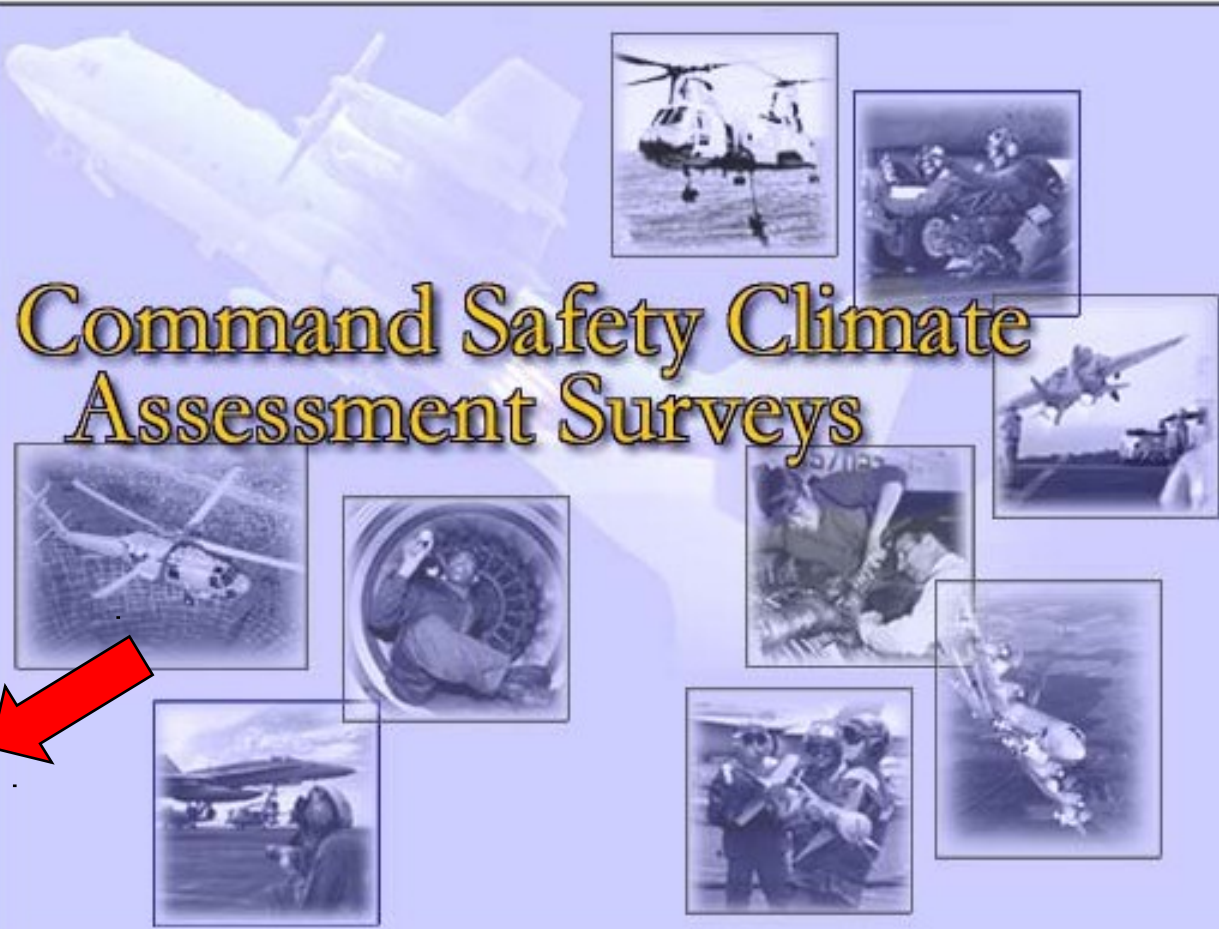
Open-ended Items



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- C.S.C.A.S. POLICY
- SURVEY INSTRUCTIONS
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Command Safety Climate Assessment Surveys



[Instructions](#)[Overview](#)[Sample
survey](#)[Take
survey](#)[Admin](#)[CO](#)[Sample
CO](#)[Map](#)[Help/FAQ](#)[Contact](#)[Suggestions](#)[Home](#)

CO ACCESS

LOGIN

Please enter the follow

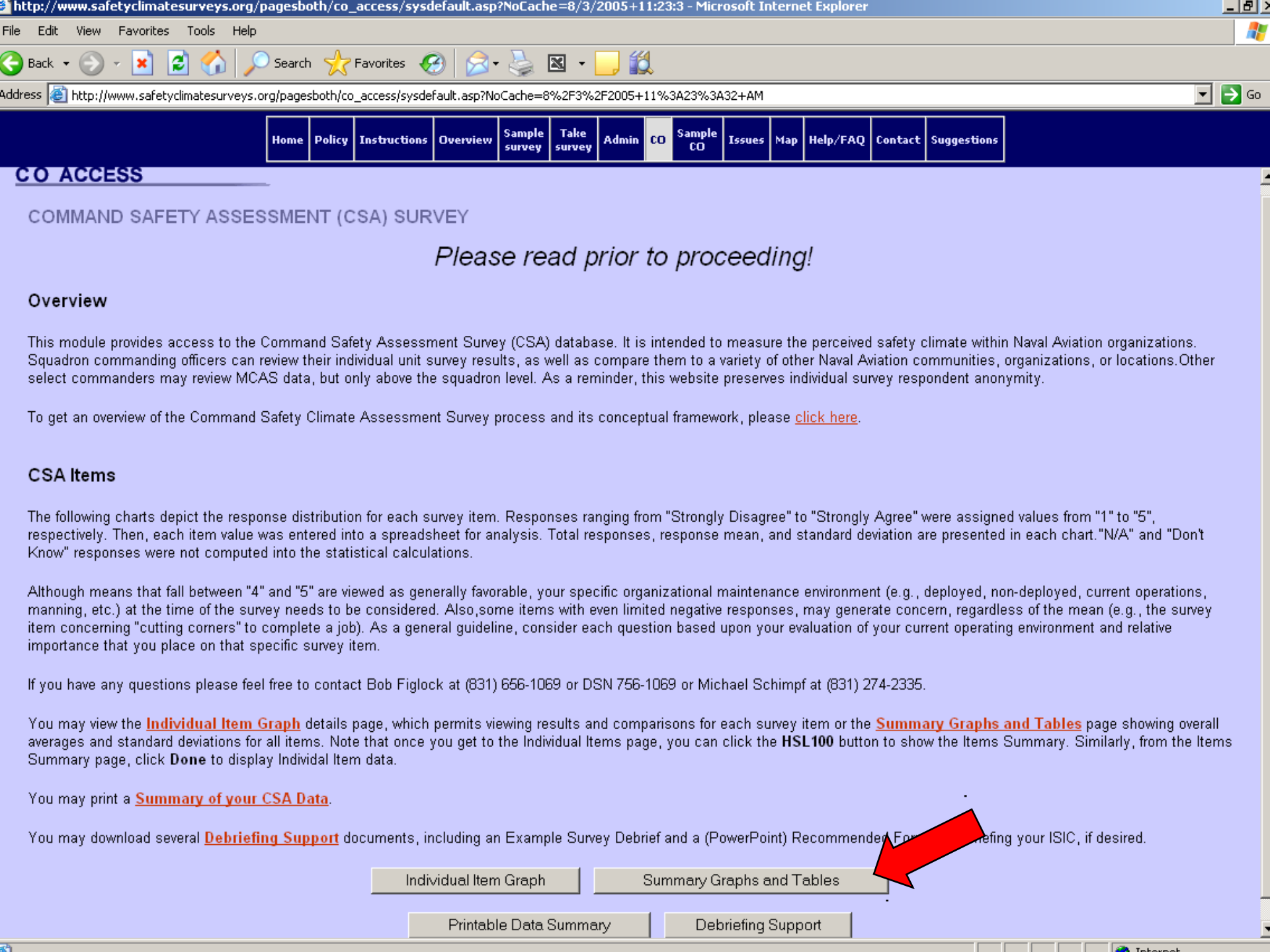
COs AccessID

**Password
Protected**

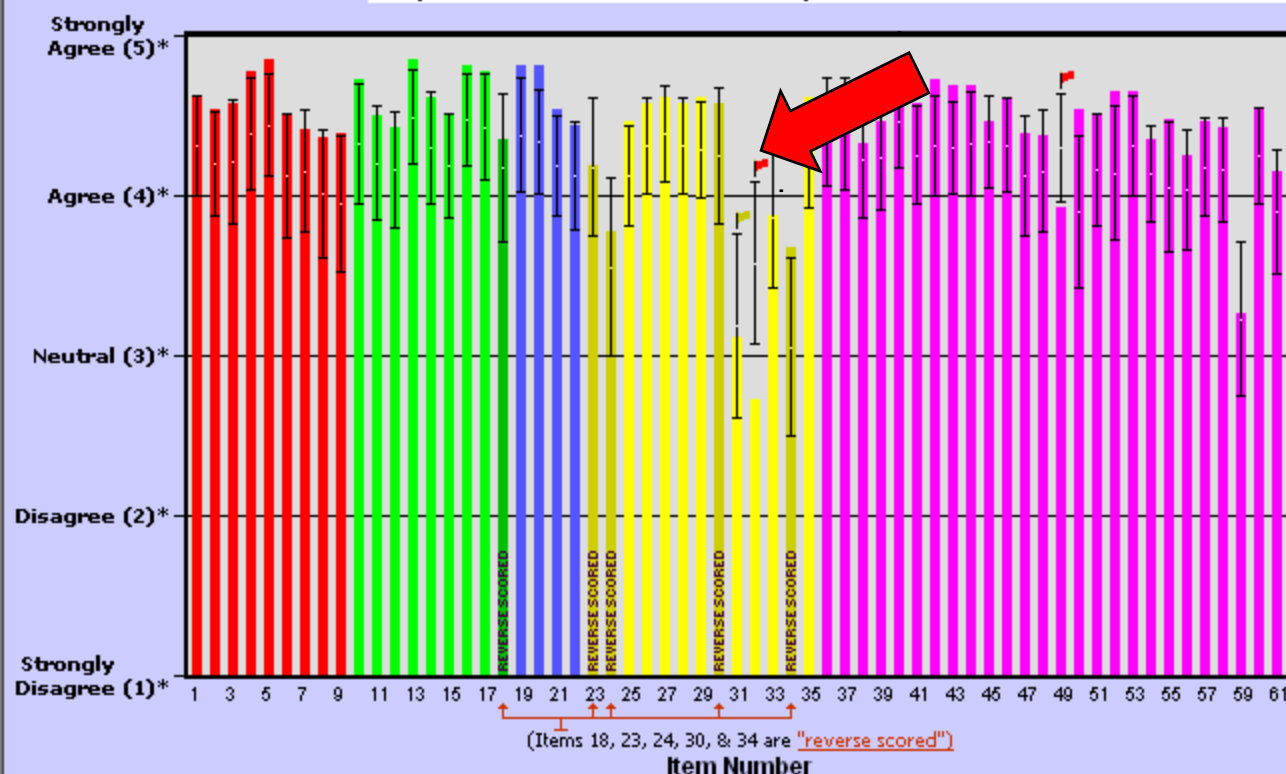
Select from the following: ▼

Community

Option: COs AccessID from squadron's *prior* surveys
(if present, comparisons will use this instead of other squadrons)



Graph Of Mean For All Items Compared With Mean And Standard Deviation For Community (VMFA)



Comparison (all years):

- ☐ All (CSA) respondents
- ☐ All Navy (CSA only)
- ☐ All USMC (CSA only)
- ☐ All fixed wing (CSA only)
- ☐ All helo (CSA only)
- ☒ My community (VMFA, CSA only)
- ☐ No comparisons

Place mouse pointer on a colored bar to show the text for that item.
Click on a bar to display Individual Item Graph.

Legend

Survey Item Category:

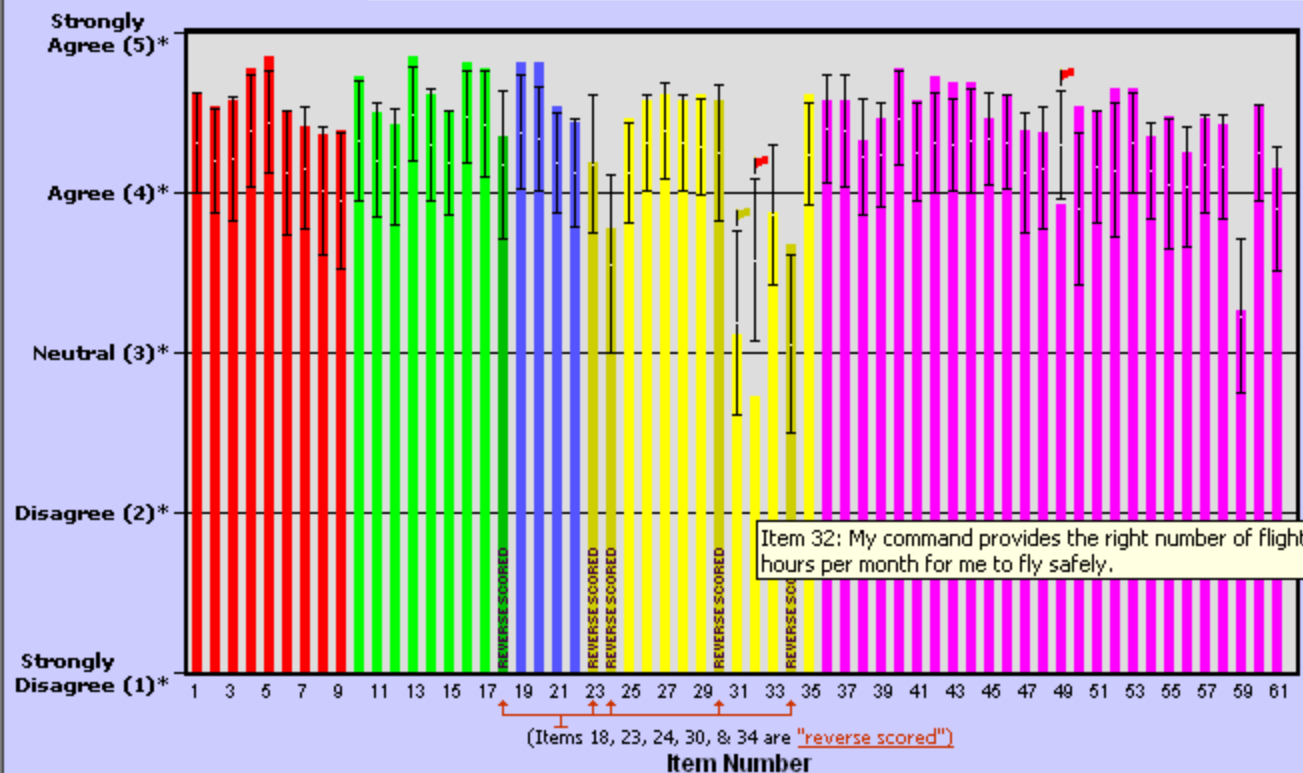
- PA: Process Auditing
- RS/SC: Reward Systems & Safety Culture
- QA: Quality Assurance
- RM: Risk Management
- CC: Command & Control

Notes:

- Comparison's standard deviation centered on its mean (white dot)
- Mean is less than comparison but within one-half standard deviation
- Mean is below one-half standard deviation less than comparison

[Composite Categories Graph](#)
[All Survey Items Table](#)
[Individual Item Graph](#)
[Printable Data Summary](#)
[Debriefing Support](#)

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- ☐ No comparisons

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Composite Categories Graph

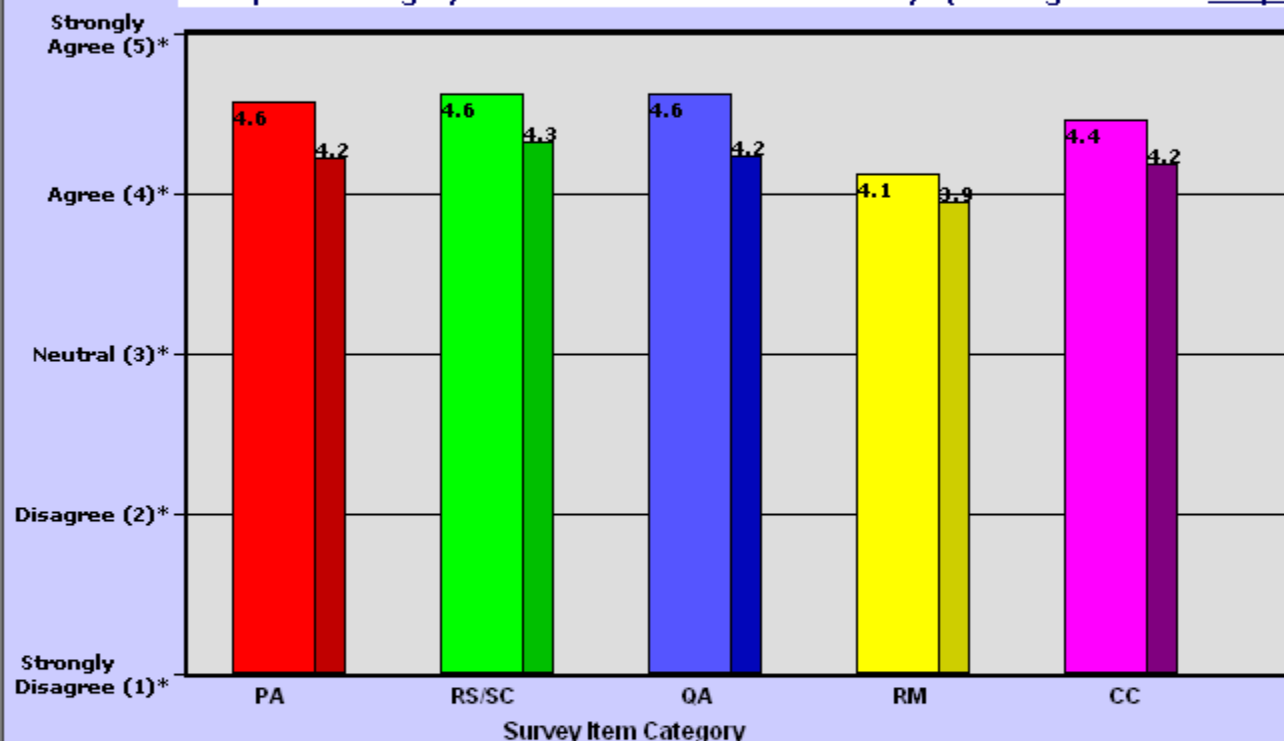
All Survey Items Table

Individual Item Graph

Printable Data Summary

Debriefing Support

Composite Category Mean scores for VMFA3029 surveys (showing Means for Comparison population)



(Light-colored bar is VMFA3029 value, dark-colored bar is VMFA Community value)

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- ☐ No comparisons

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All Survey Items Graph

All Survey Items Table

Individual Item Graph

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survey](#)[Take
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CO ACCESS

LOGIN

Please enter the following:



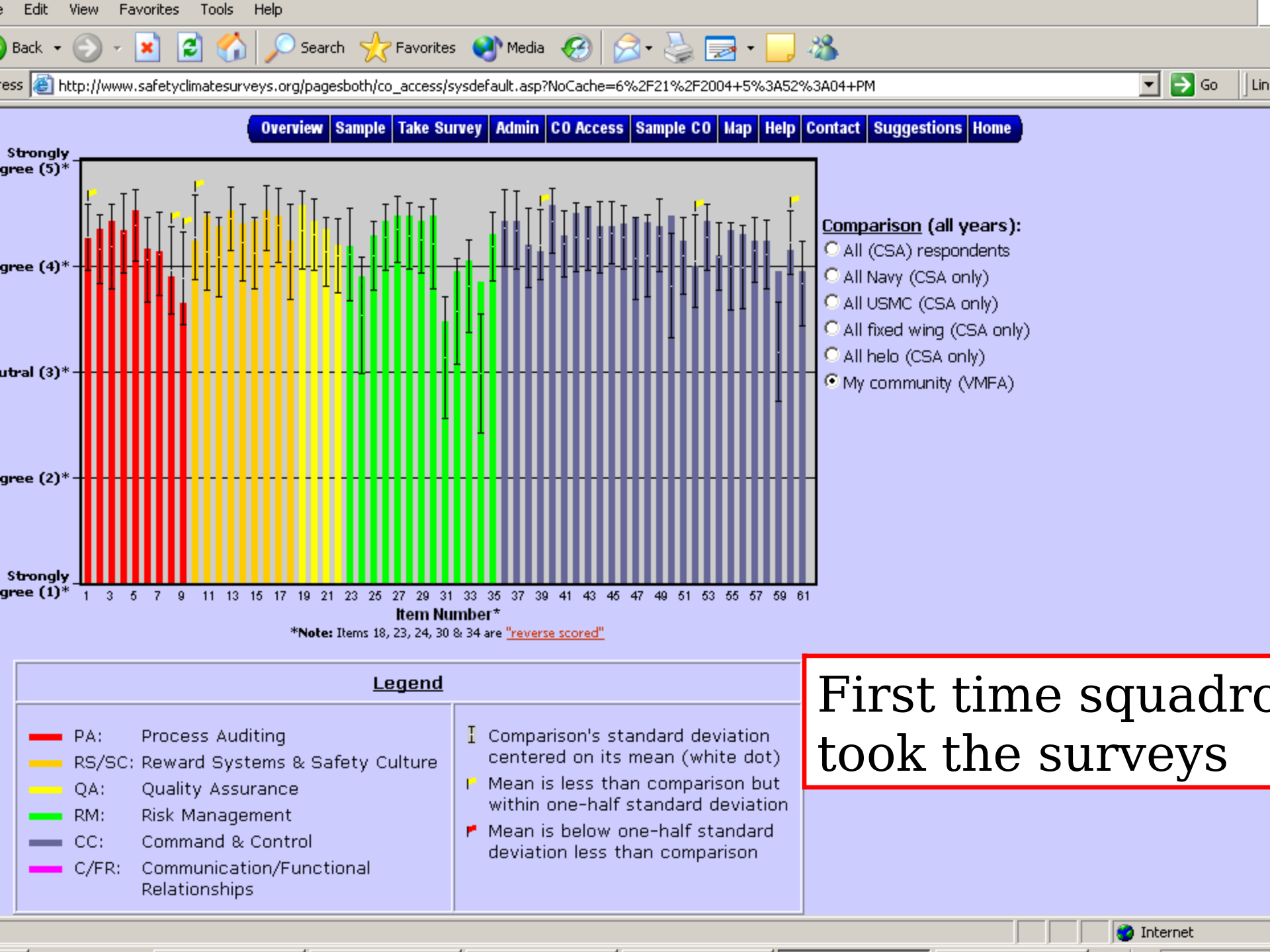
COs AccessID

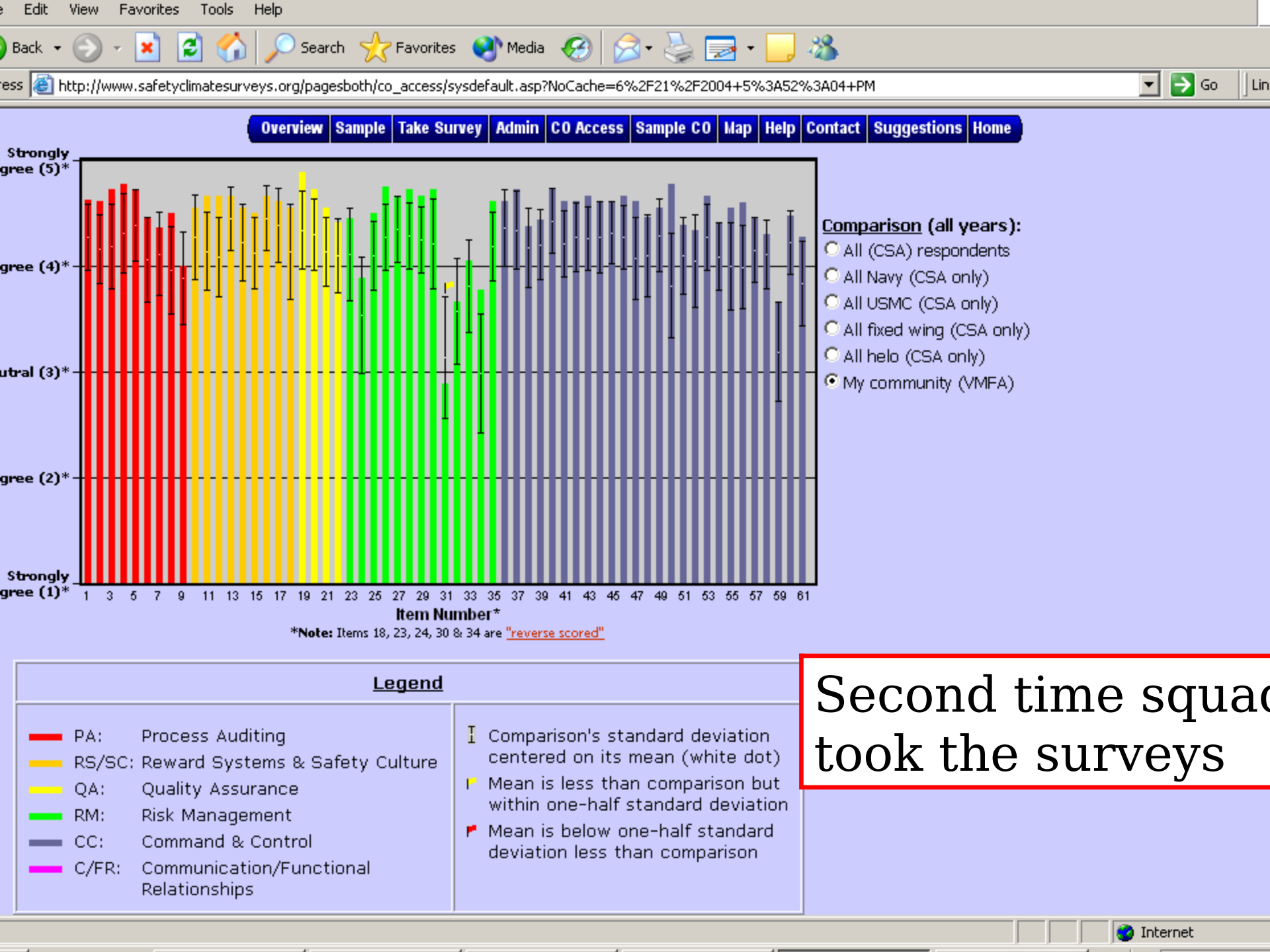
Community

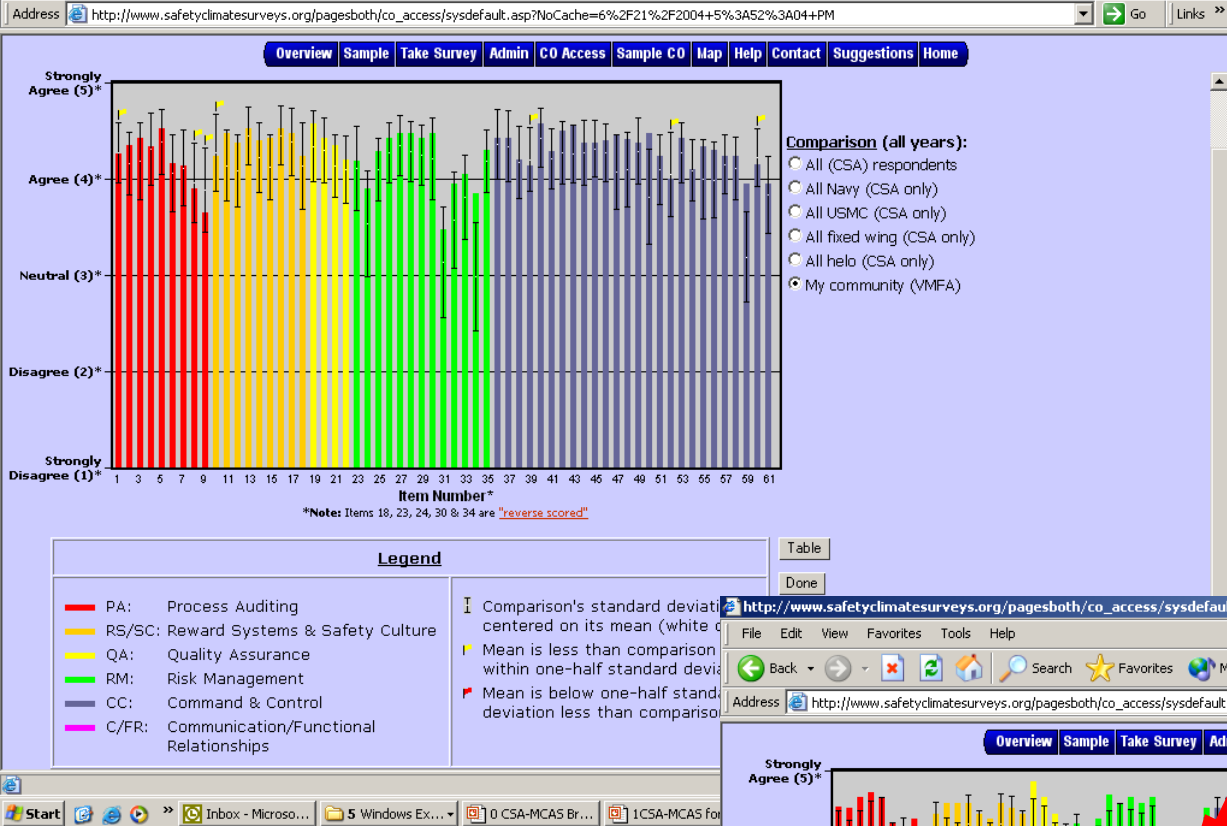


Option: COs AccessID from squadron's *prior* surveys
(if present, comparisons will use this instead of other squadrons)

Two Codes, Current and Prior

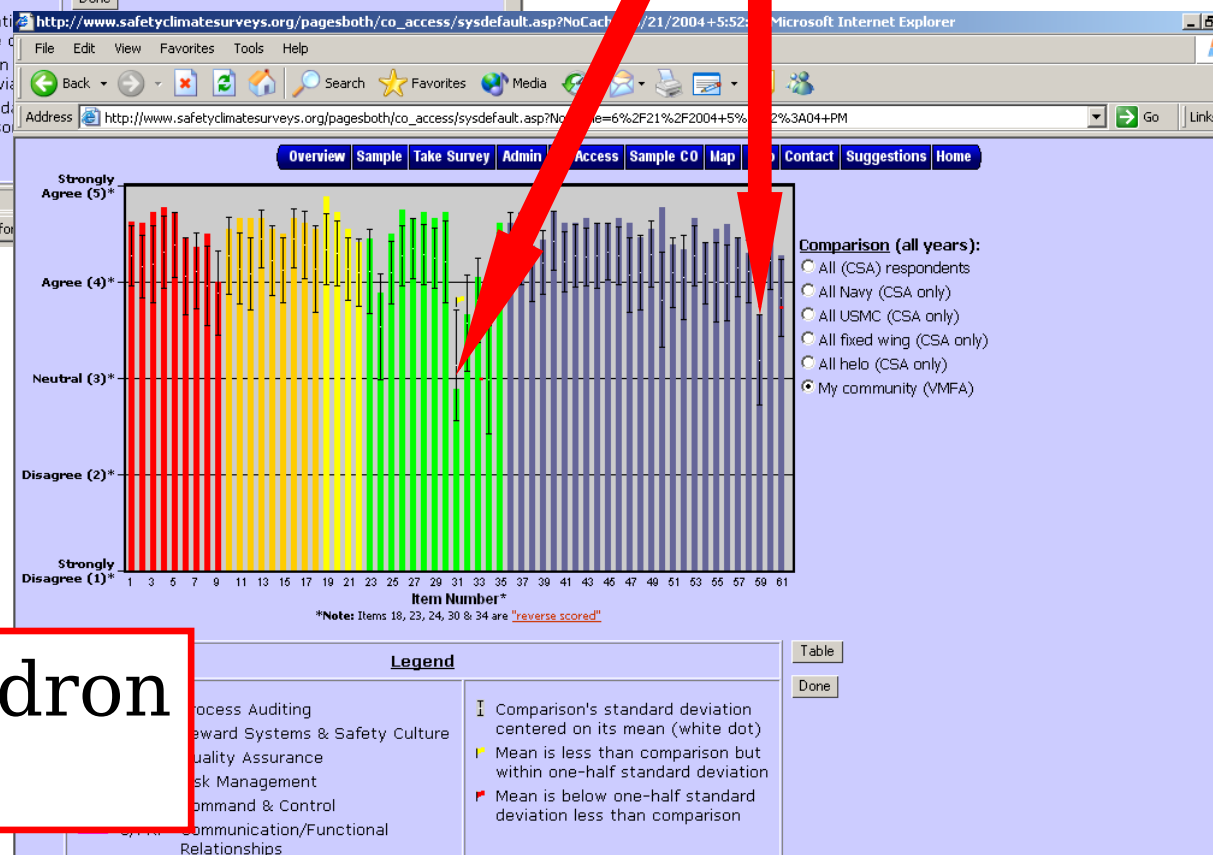




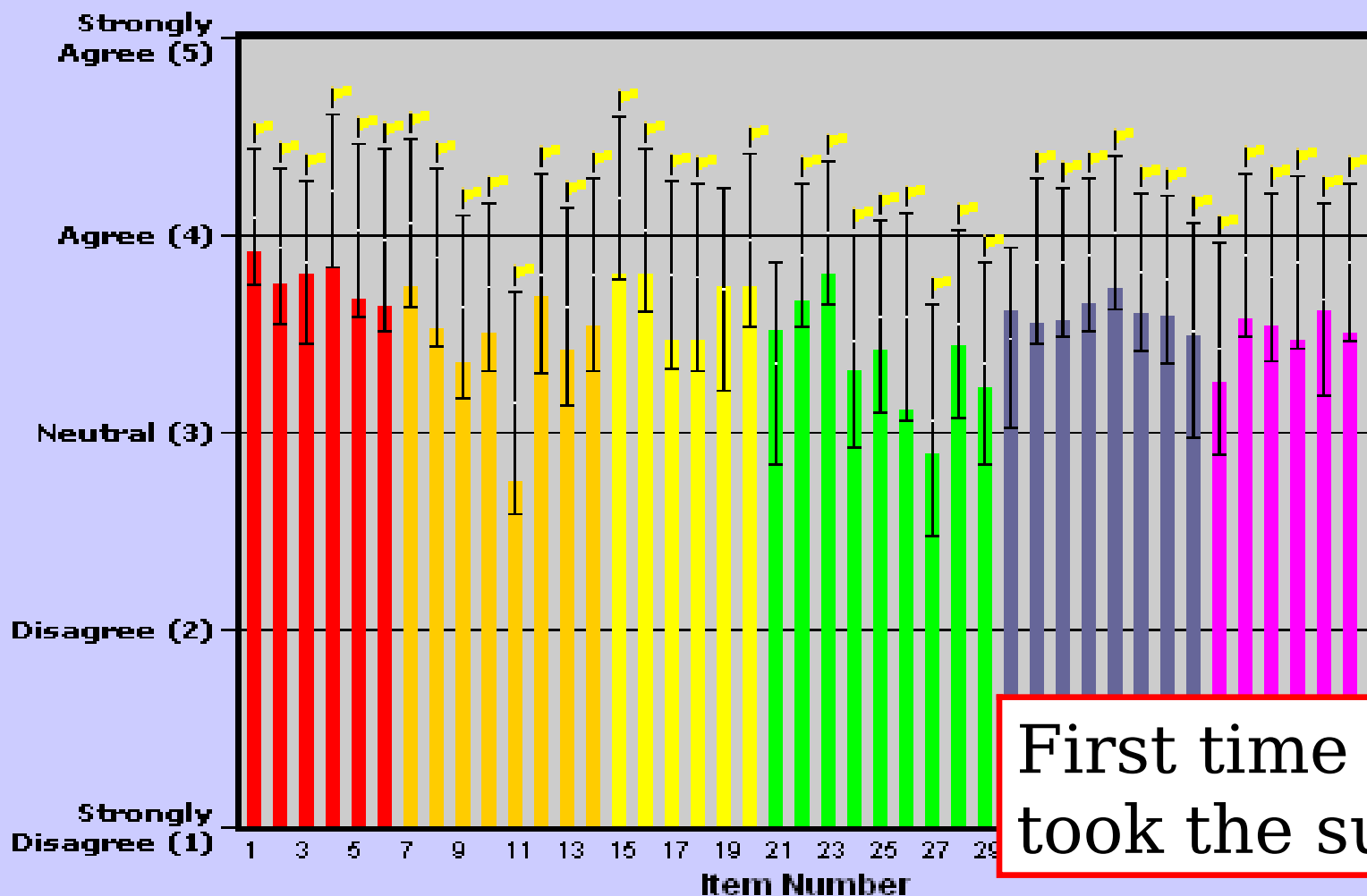


First time squadron took the surveys

Note: two di



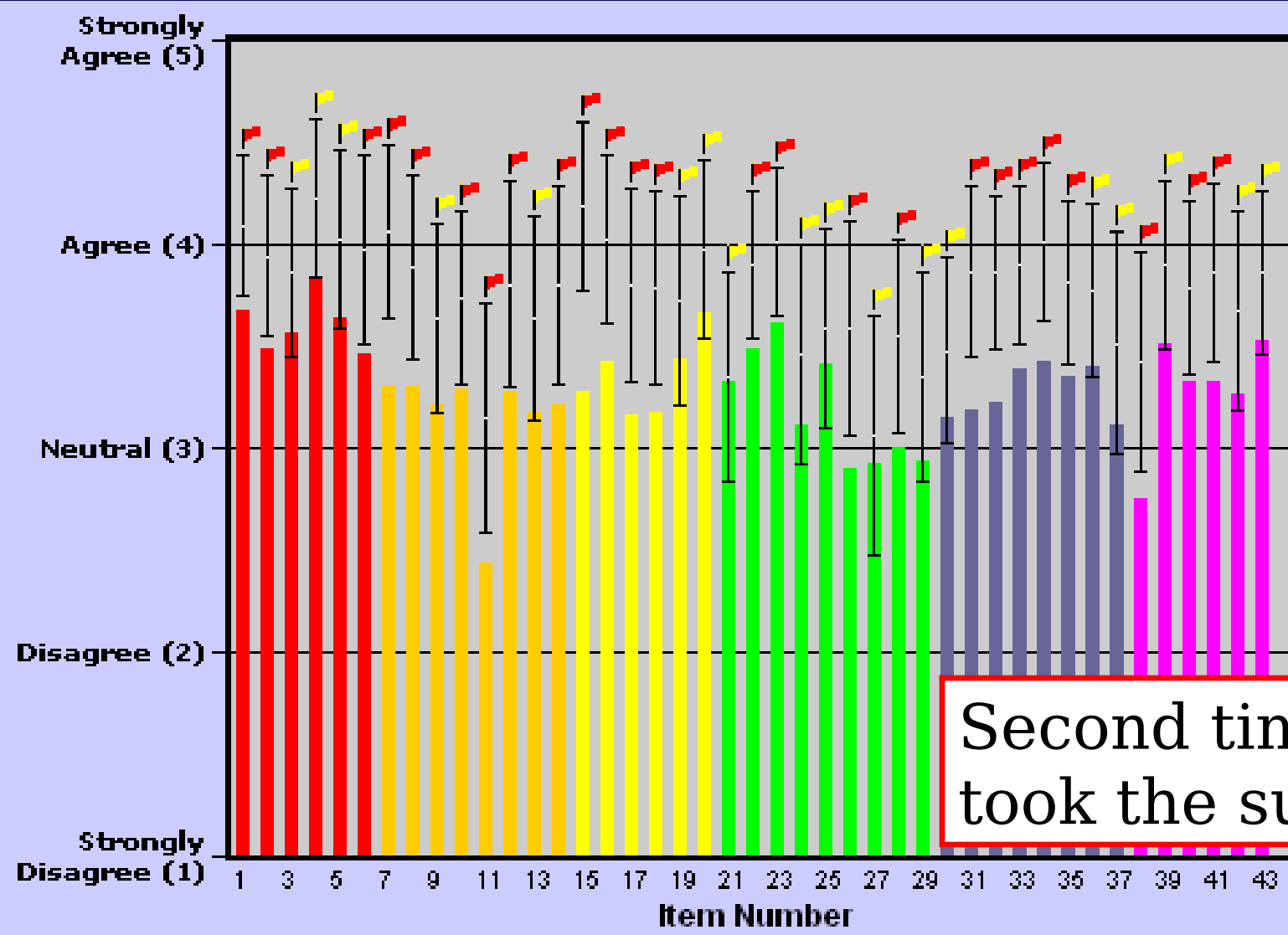
Second time squadron took the surveys



Comparison (all)

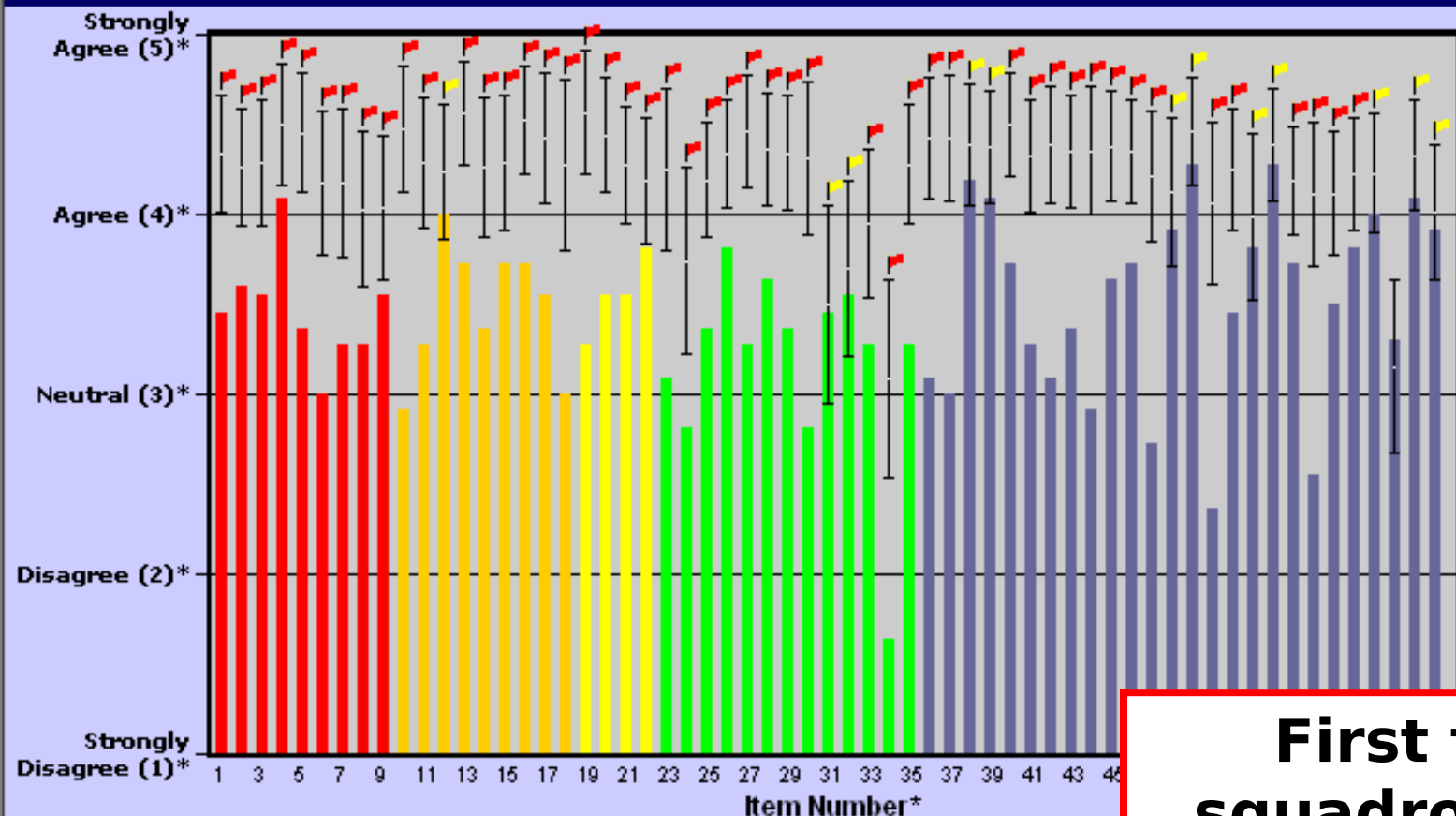
- ☐ All (MCAS) res
- ☐ All Navy (MCAS)
- ☐ All USMC (MCA
- ☐ All fixed wing (
- ☐ All helo (MCAS)
- ☒ My community
- ☐ No comparison

First time squadron took the surveys



- Comparison (all)**
- ☐ All (MCAS) resp
 - ☐ All Navy (MCAS)
 - ☐ All USMC (MCA
 - ☐ All fixed wing (f
 - ☐ All helo (MCAS
 - ☒ My community
 - ☐ No comparisons

Second time squadr took the surveys

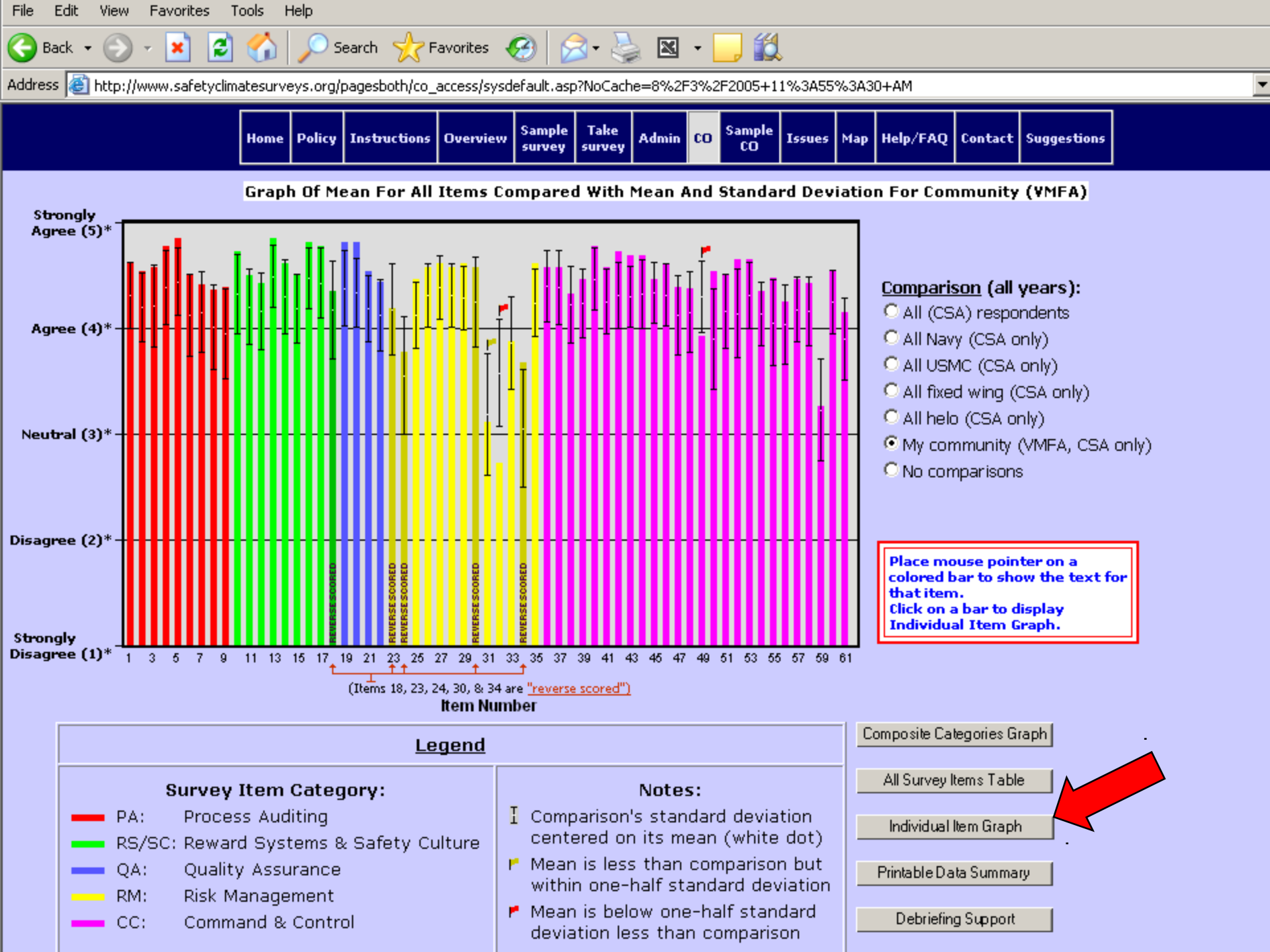


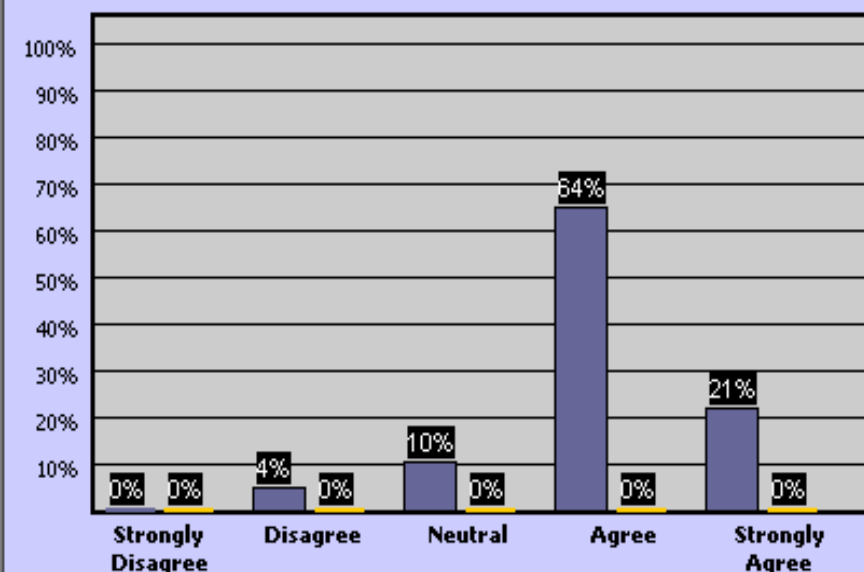
- Comparison (all year)**
- ☐ All (CSA) responder
 - ☐ All Navy (CSA only)
 - ☐ All USMC (CSA only)
 - ☐ All fixed wing (CSA only)
 - ☐ All helo (CSA only)
 - ☒ My community
 - ☐ No comparisons

**First time
squadron took
CSA surveys**



(new SS, one year)



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Item 1:

My command conducts adequate reviews and updates of safety standards and operating procedures. (PA)

Select item(s) to display:

☐ 1
☐ 1 ☒ Hide

Show Summary Graphs and Tables for:

HSL 100

Intervention Strategies ← New!

N/A:

☐ 0 ☐ 0

Don't Know:

☐ 6 ☐ 0

Select A Comparison Mode:

☐ Aircraft Category☐ Aircraft Community☐ Aircraft Model☒ None**Legend** (click small colored squares to hide percentage displays):HSL 100: ☐ n=70, mean=4, SD=0.7COMPARISON: ☐ n=Note: "N/A" and "Don't Know" responses are not included in statistics.



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SURVEY OVERVIEW

SAMPLE SURVEY

TAKE A SURVEY

SURVEY ADMIN

C.O. ACCESS

SAMPLE C.O. ACCESS

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VMFA 102 Commander's Access

68. THE MARINES IN THIS SQUADRON WORK ANYWHERE FROM 12 TO 16 HOURS EVERY 5 TO 6 DAYS A WEEK WHEN WORKING 12 HOURS ON AND 12 OFF. SOME MEALS ARE MISSED BECAUSE THEY ARE SO TIRED FROM WORK THAT THEY SLEEP THE ENTIRE 7 TO 10 HOURS THEY ARE OFF. OR, WHEN WORKING THEY ARE NOT AFFORDED ENOUGH TIME TO EAT DURING MAINTENANCE AND GO ON AN EMPTY STOMACH TILL THEY GET OFF WORK. FOR EXAMPLE: A MARINE WHO IS ON COM RATS IS EXPECTED TO BRING THERE CHOW WITH THEM TO WORK. SAY THIS MARINE LIVE'S IN GEO BACHELORS QUARTERS WITH 2 OTHER MARINES AND 1 SMALL FRIDGE. THIS MARINE NORMALLY EATS AT THE CHOW HALL NOT ONLY TO SAVE MONEY BECAUSE HE HAS A CAR PAYMENT, INSURANCE, CHILD SUPPORT, ETC., BUT HE'D RATHER EAT THERE BECAUSE IT IS MORE NUTRITIONAL THAN EATING SOMETHING LIKE BURGER KING. HE DOES NOT GET

Item: 44 Next

Year: All

Good Ideas Help

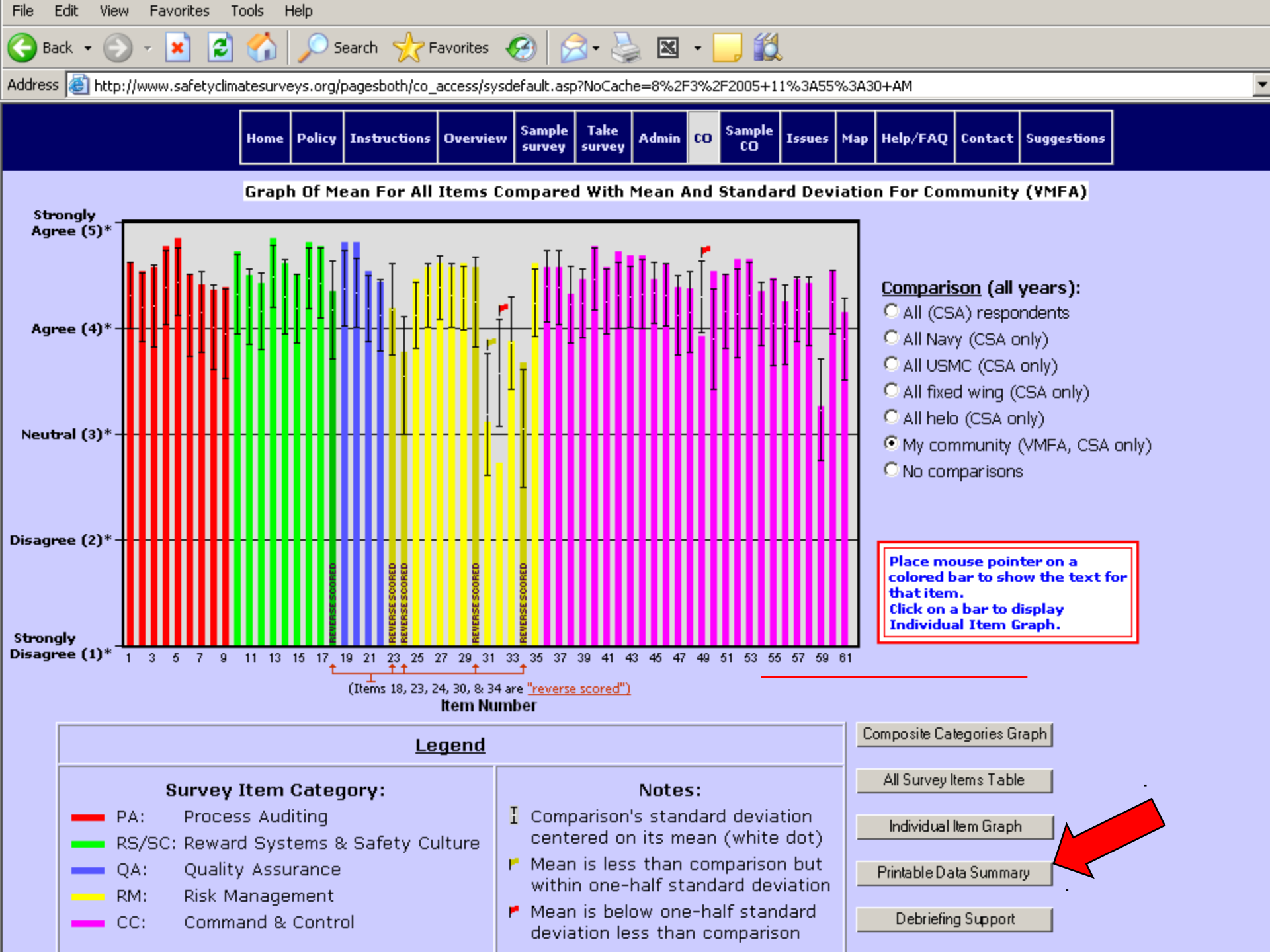
Update Display

Item 44:

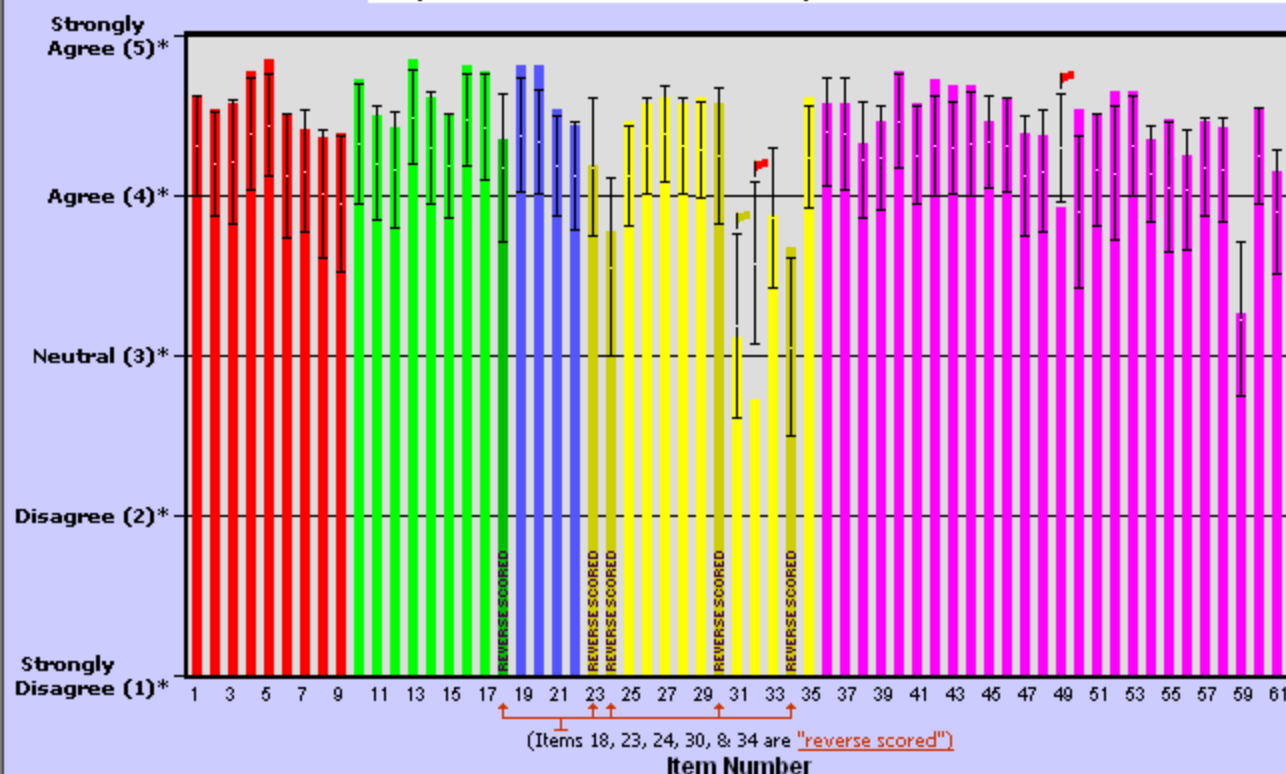
The next quality defect will be caused by... (200 words max.) (QA)

Select A Comparison Mode:

- ☐ Aircraft Category
- ☐ Aircraft Community
- ☐ Aircraft Model



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Legend

Survey Item Category:

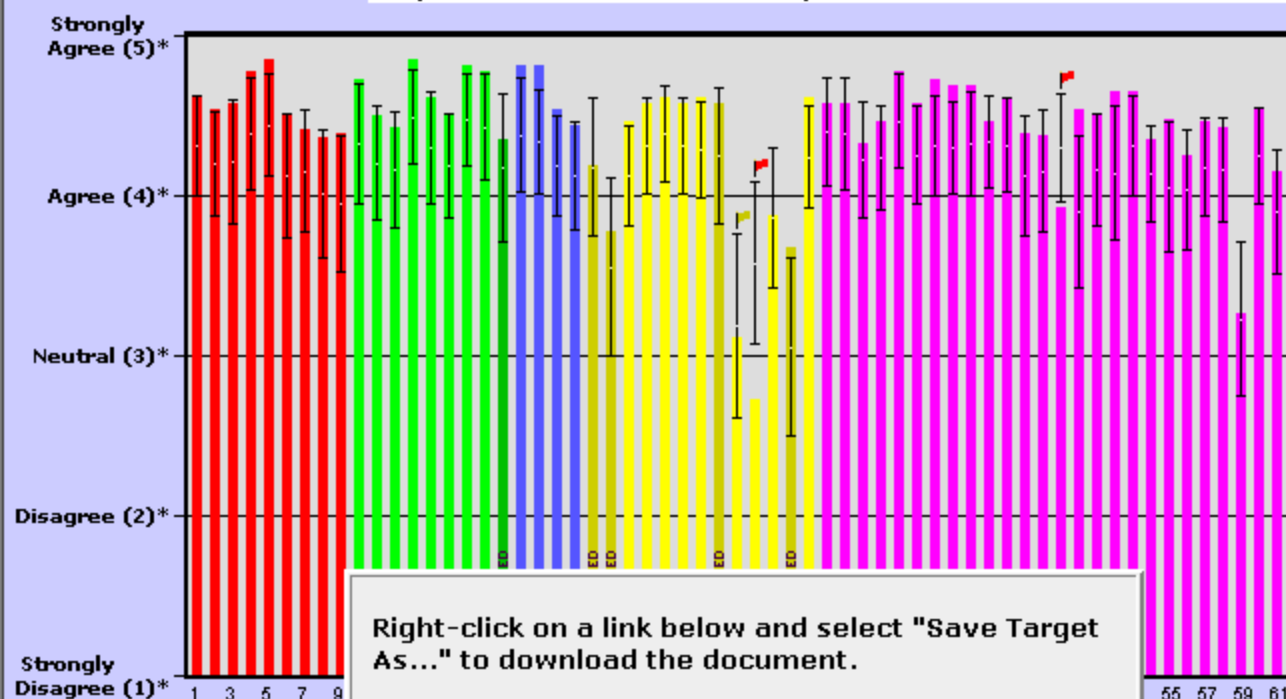
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Click on a bar to display Individual Item Graph.

Right-click on a link below and select "Save Target As..." to download the document.

[Example Survey Debrief](#)

[Recommended Format for Debrief](#)

Close dialog

Survey

- PA: Process
- RS/SC: Reward Systems & Safety Culture
- QA: Quality Assurance
- RM: Risk Management
- CC: Command & Control

- Mean is less than comparison but within one-half standard deviation
- Mean is below one-half standard

Composite Categories Graph

All Survey Items Table

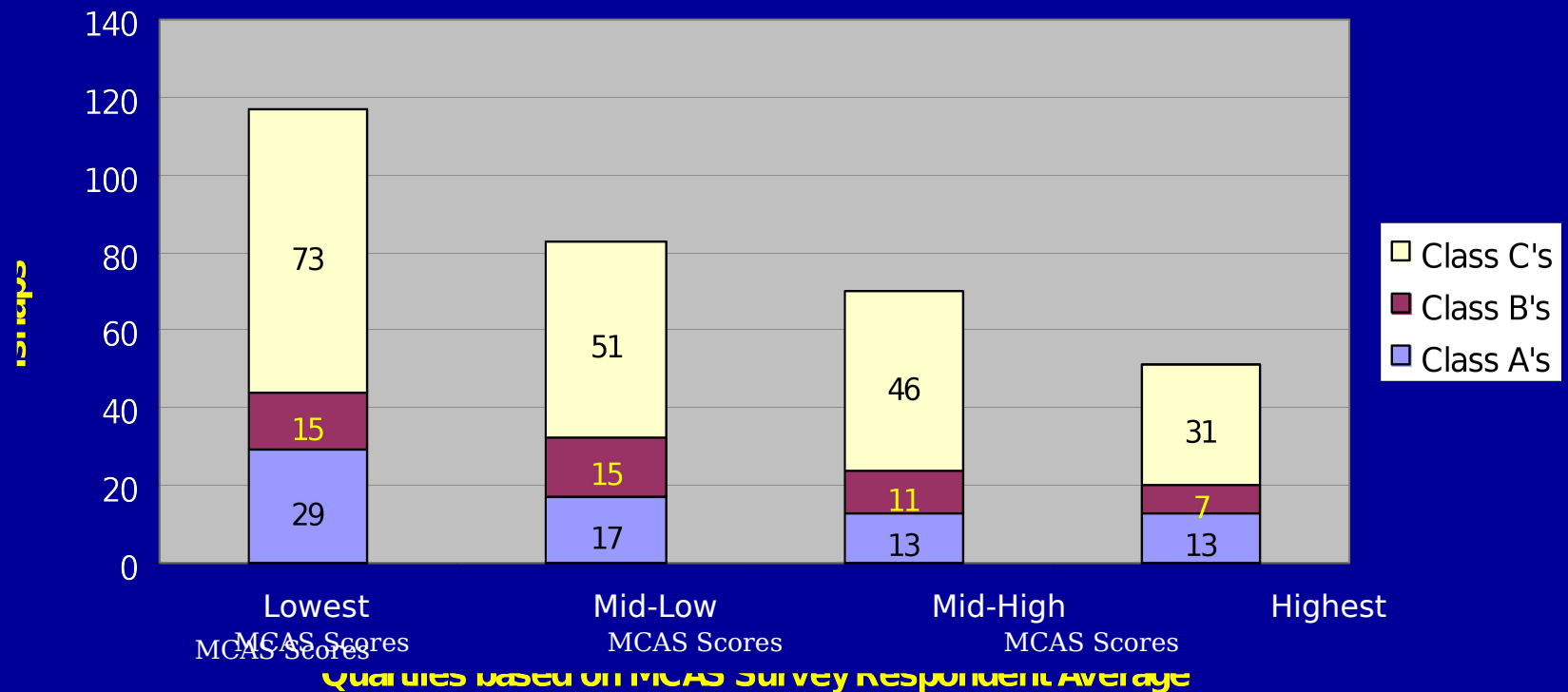
Individual Item Graph

Printable Data Summary

Debriefing Support

Navy Research Results

Mishaps within 2 Years of MCAS Survey



Navy Research Results

Item #31: I am provided adequate resources (time, staffing, budget, & equipment) to accomplish my job.

Class A's within 2 Years of Safety Climate Survey

